

D.P.U. 94-142-A

Investigation by the Department of Public Utilities upon its own motion regarding the revision of the present regulations 220 C.M.R. § 107 governing the procedures to be followed by gas corporations and municipalities subject to G.L. c. 164 relating to the inactivation, abandonment and leakage survey of gas service lines; and the amendment of the present regulation 220 C.M.R. § 69.03 governing the commencement of enforcement proceedings involving violations of safety regulations.

I. INTRODUCTION

On September 2, 1994, the Department of Public Utilities ("Department") issued an Order Commencing Rulemaking and Proposing Regulations, Notice of Public Hearing, and Solicitation of Initial Comments with reference to the regulations on the inactivation, abandonment, and leakage survey of gas service lines and the commencement of enforcement proceedings. Gas Service Line Rulemaking, D.P.U. 94-142, "Order Commencing Rulemaking" (September 2, 1994) ("Order Commencing Rulemaking"). In the Order Commencing Rulemaking, the Department raised issues concerning the practicability of compliance and enforcement of the regulations. Id. at 2-11.

Pursuant to notice duly issued, the Department accepted initial,¹ supplemental,² and final³ comments on the proposed regulations.⁴ On November 29, 1994, a public hearing was held to

¹ Initial comments were received from Bay State Gas Company ("Bay State"), Colonial Gas Company ("Colonial"), Fall River Gas Company ("Fall River"), and the Massachusetts Natural Gas Council ("Gas Council"). The Gas Council is composed of investor-owned and municipal natural gas utilities in the Commonwealth, including Bay State, The Berkshire Gas Company ("Berkshire"), Boston Gas Company ("Boston Gas"), Colonial, Commonwealth Gas Company ("ComGas"), Essex County Gas Company ("Essex"), Fall River, Fitchburg Gas and Electric Company ("Fitchburg"), North Attleboro Gas Company ("North Attleboro"), the Middleboro Gas and Electric Department, Wakefield Municipal Light Department, the Westfield Gas and Electric Light Department, and the Holyoke Gas and Electric Light Department.

² Supplemental written comments were received from Bay State, Berkshire, Boston Gas, Colonial, ComGas, Essex, the Gas Council, and North Attleboro.

³ The Department accepted final comments on February 10, 1995 from Bay State, Berkshire, Boston Gas, Colonial, ComGas, Essex, and the Gas Council.

⁴ Although the Attorney General of the Commonwealth ("Attorney General") notified the Department of his intervention in this matter, he did not submit any comments.

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receive oral comments⁵ on the proposed regulations.

The Department issued an Order adopting final regulations regarding the abandonment of gas service lines and commencement of enforcement proceedings on February 27, 1995. Gas Service Line Rulemaking, D.P.U. 94-142 (1995) ("Order"). In the Order, however, the Department noted that the comments raised issues indicating that the Department take a second look at the proposed leakage survey regulations. Id. at 17. Therefore, the Department reserved judgment on the regulations governing leakage surveys. Id. at 18. The Department authorized the Director of the Pipeline Engineering and Safety Division ("Director") to conduct informal discussions with a consultative panel and instructed him to report panel comments to the Department. Id. The Department allowed the existing regulations governing leakage surveys to remain in effect and unchanged by the final regulations effected by the Order of February 27, 1995, pending the Director's report. Id.

The Director assembled a consultative panel as authorized by the Order.⁶ On June 22,

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Inasmuch as the instant proceeding is a rulemaking and not an adjudicatory proceeding, persons are not required to intervene in order to comment.

⁵ Testimony was received from John P. Erickson, vice-president of operating and engineering services with the American Gas Association; Kenneth Margossian, president and chief operating officer of ComGas and Hopkinton LNG Corporation and chairman of the Gas Council; Thomas Bonner, vice-president, distribution for Boston Gas; Paul LaShoto, director of operations and chief engineer for Bay State; Stanley T. Kastanas, manager of regulatory compliance and project engineering for Colonial; and John Dustin, superintendent of technical services at ComGas.

⁶ The panel members were: John Dustin; Stanley Kastanas; Paul LaShoto; Stuart Hemingway, general manager of the West Roxbury division of Boston Gas; and Robert Werlin, Esq., Keohane and Keegan, P.C.

1995, the Director submitted to the Department a report of the panel's comments on the regulations governing leakage surveys ("Director's Report").

II. DISCUSSION AND ANALYSIS

There are presently both federal and Department regulations governing leakage surveys. The federal regulation, 49 C.F.R. Part 192, requires operators of distribution systems to conduct leakage surveys using leak detector equipment in business districts annually, but at intervals not to exceed fifteen months. 49 C.F.R. § 192.723(b)(1). The regulation further requires operators of distribution systems to conduct leakage surveys using leak detector equipment outside business districts at intervals not exceeding five years. 49 C.F.R. § 192.723(b)(2). The five-year interval is reduced to three years if the operator uses leakage surveys to determine areas of active corrosion on cathodically unprotected steel distribution lines where electrical surveys are impractical. Id.

The Department's regulation at 220 C.M.R. 101.06(21), entitled Distribution System Leakage Surveys and Procedures, requires operators to perform an annual leakage survey, employing a gas detector, on the distribution system in business districts. This regulation also requires operators to perform leakage surveys in areas outside the business district at least once in every twenty-four month period. Id. Alternative forms of leakage survey, such as bar tests, pressure drop tests and vegetation surveys are allowed for both business and non-business areas. Id. Section 101.06(21) imposes no requirement for gas detector equipment in non-business areas; but it does require annual leakage surveys of the service lines in buildings of congregation (i.e., churches, schools, arenas, and hospitals).

The Department regulation at 220 C.M.R. 107.07, entitled Leakage Survey of All Service

Lines, requires operators to employ gas detection equipment over all active and inactive service lines outside of business districts, as defined in 220 C.M.R. 101.06(21)(a), at intervals not exceeding five years and at a rate of twenty percent per year. It states that if any part of 220 C.M.R. § 107.07(1) conflicts with 220 C.M.R. § 101.0[6], section 107.07(1) shall be controlling.

These three separate regulations subject operators to redundant and divergent leakage survey requirements. In the Order Commencing Rulemaking, the Department sought to define leakage survey requirements of operators concerning service lines located outside business districts. Order Commencing Rulemaking at 9. The proposal intended to align the state regulations governing the timing of leakage surveys of service lines with the federal regulation. Id. at 9-10, 12. In addition, the proposed regulations would have reduced the burden on operators who, in strict compliance with 49 C.F.R. § 192.793, are required to perform leakage surveys on the segment of a service line inside a building wall. Id. at 10, 13.

The Director's Report contained several recommendations. First, the report recommended the elimination of the redundancy and variation in leakage survey requirements between 220 C.M.R. § 101.06(21) and 220 C.M.R. § 107.07. While this would result in a clearer and more comprehensive regulation governing leakage surveys, the Department noticed this rulemaking as an investigation to revise 220 C.M.R. § 107 and 220 C.M.R. § 69.03. There has been no notice to revise 220 C.M.R. § 101. Nonetheless, for reasons stated below, the Department finds that the regulations governing leakage surveys do require some revision. Therefore, the Department will adopt revisions to 220 C.M.R. § 107.07, which will remain in

effect until the Department notices an investigation to revise 220 C.M.R. § 101 and to consolidate the conflicting sections and until the Department adopts final regulations revising 220 C.M.R. § 101.

In the Order Commencing Rulemaking, the Department stated that the proposed regulations would be more cost effective as to any related risk to public safety. Order Commencing Rulemaking at 14, citing United States v. Carroll Towing Company, 159 F.2d 169, 173 (1947); S. Breyer, Breaking the Vicious Circle: Toward Effective Risk Regulation (1993). The Department further stated that the purpose of the proposed revisions to 220 C.M.R. § 107 was to make the burdens imposed on service line operators commensurate with any incremental safety to be derived from the enforcement of the regulation. Id. at 2. Thus, the Department proposed that operators should conduct leakage surveys of the exterior portion of the service line at intervals not exceeding five years for plastic and cathodically protected steel services. Id. at 12-13. The Department also proposed that operators conduct leakage surveys with combustible gas detectors outside business areas on that portion of the service line between the interior building wall and the meter outlet ("interior service line") at intervals not to exceed five years. Id.

Although the requirements for leakage surveys appear consistent with federal requirements, the federal requirements do not make a distinction in leakage survey requirements for mains and service lines. 49 C.F.R. § 192.723. The federal language is comprehensive and seems to imply that operators must conduct a leakage survey of every inch of pipeline in their system over the applicable three or five year interval. Id. The Director's Report concluded that the Department, in its proposed regulation, effectively attempted to impose a practically

impossible requirement of compliance because interior service lines are not often accessible to operator personnel. According to the panel's comments, 69 percent of the natural gas customers have inside meters in the Commonwealth. The written and oral comments also supported the position that operators are experiencing increasing difficulty in accessing interior service lines in order to conduct leakage surveys. Panel members presented cost estimates derived from meter reading data, leakage surveys and meter replacement studies, to demonstrate that uninvited access to interior service lines outside business areas is a futile exercise with diminishing returns. According to the Director's Report, a hard-line enforcement policy in this area could result in interior piping surveys accounting for ninety percent of the costs of an operator's leakage survey program.

The Director's Report also concluded that there has never been an incident, as "incident" is defined in 49 C.F.R. § 191.3, in the Commonwealth that resulted from leakage on interior piping subject to a gas company's jurisdiction. The Director's Report further stated that the Department regulations, which require that operators odorize natural gas in distribution lines so that the gas odor is detectable at fifteen hundredths of a percent gas in air (0.15%), provides a sufficient public safety mechanism should gas leakage occur in the exposed interior piping. 220 C.M.R. § 101.106(20)(a). The Director's Report noted that the Department regulations are more strict in this area than the federal regulations, which require the odor of gas to be perceptible at one percent in air. Compare 220 C.M.R. § 101.106(20)(a) with 49 C.F.R. § 192.625(a).

Based on the foregoing, the Department determines that it is necessary to adopt final regulations governing leakage surveys. Given the economic burden placed on service line

operators to access and survey all service lines, and the questionable value to increased public safety by strict compliance with the present regulations, the Department determines that leakage surveys of all service lines should be conducted as frequently as experience and technology indicate. To this end, each service line operator shall establish a complementary leakage survey program under which operator personnel, who otherwise enter a customer's premises for service calls, odor complaints, meter repairs, or meter replacements, also perform indoor leakage surveys. All service line operators must continue to conduct leakage surveys in accordance with the federal regulations, 49 C.F.R. § 192.723. This approach to leakage survey will yield operational efficiencies and economies with no perceptible derogation of public safety. Accordingly, the final regulations include language to this effect.

III. ORDER

Accordingly, after due notice, public hearing, and consideration, and under authority of G.L. c. 164, §§ 76, 76C, and 105A, it is

DETERMINED: That the regulation designated and amended as 220 C.M.R. § 107.07 is reasonably necessary for the administration of Chapter 164 of the General Laws; and it is

ORDERED: That 220 C.M.R. § 101.07 be amended to read as follows:

107.07: Leakage Surveys for All Service Lines

- (1) Each operator of gas service lines shall conduct leakage surveys over all service lines as frequently as experience and technology indicate are necessary, and in accordance with 49 CFR Part 192.
- (2) If any part of 220 CMR 107.07 conflicts with Department regulations contained in 220 CMR 101.06, 220 CMR 107.07 shall be controlling.

FURTHER ORDERED: That this regulation shall take effect upon publication in the
Massachusetts Register.

By Order of the Department,

Mary Clark Webster, Commissioner

Janet Gail Besser, Commissioner